



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/581,739

06/06/2006

Stefan Schneweis

06060

8690

23338 7590 03/22/2010
DENNISON, SCHULTZ & MACDONALD
1727 KING STREET
SUITE 105
ALEXANDRIA, VA 22314

EXAMINER

MILLER, MICHAEL G

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

03/22/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Amendment

1. Examiner notes the amendment filed 23 FEB. The amendment will not be entered final, as it raises new matters for consideration (Claim 23 explicitly requires conversion of the framework materials into carbon and/or silicon carbide fibers, which is a new limitation presented with this amendment) and is not deemed to place the application in better condition for appeal by reducing or materially simplifying the matters for appeal.

Response to Arguments

2. Applicant's arguments filed 23 FEB 2010 have been fully considered but they are not persuasive.

3. In response to Applicant's argument that the thickness of the carbon structure in the prior art precludes it from being used as a support in a gas treatment system, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Applicant has provided no evidence to the contrary, instead asserting a belief. Examiner notes that the substrate must inherently be capable of supporting its own weight and also notes that carbon fiber is known for having a strength/weight ratio greater than unity, which means it can support more than its own weight. If it can support more than its own weight, it is

Art Unit: 1792

capable of supporting an object other than itself and can therefore be used as a support.

4. In response to Applicant's argument that Christner does not teach a felt, non-woven material or fabric, Examiner respectfully disagrees and references the mat mentioned by Applicant on Page 5. The mat is a tangled, non-woven agglomeration of fibers and is therefore considered to be a felt.)

5. In response to Applicant's argument that Carroll is intent on teaching a method to close the pores of its preform, thus teaching away from the claimed invention, Examiner respectfully disagrees. Carroll does teach a densification process, but the statement of the invention teaches that the densified structure still contains pores which contain a graded carbon-ceramic composition (Column 3 Lines 50-57). If the densified structure still contains pores, it is still porous and would therefore be analogous to Christner.

6. In response to Applicant's argument that Sekhar does not disclose treatment of a porous material, Examiner respectfully disagrees. Applicant has shown no proof whatsoever that any of the treatment methods which are alleged as indicia of a solid substrate cannot be performed on a porous substrate. By way of example, dipping a porous structure into a liquid to draw the liquid into the pores is a common household operation (a sponge). Similarly, there is no evidence on the record that sandblasting, pickling, dipping or spraying operations can only be performed on solid, non-porous passages.

7. In response to Applicant's argument that Bernard teaches away from Christner, Examiner respectfully disagrees. Bernard's method, exemplified by Claim 1, calls for

Art Unit: 1792

continual passage of liquid through the object to be densified in order that the densification powder may be deposited. If the liquid continues to be forced through the substrate, the substrate must inherently have pores through which the liquid can pass.

8. The remainder of Applicant's arguments are moot, as they are based on the amendment being entered. As such, they have been considered but are not relevant to the application at the present time.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL G. MILLER whose telephone number is (571)270-1861. The examiner can normally be reached on M-F 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on (571) 272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1792

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael G. Miller/
Examiner, Art Unit 1792

/Michael Cleveland/
Supervisory Patent Examiner, Art Unit 1792